

CellSoft® Soft Substrate 100mm Diameter Round Culture Dishes

Product Information Sheet
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Cells sense soft! CellSoft® Soft Substrate culture dishes are designed to meet the needs of biological laboratories wanting to grow their cells on native stiffness substrates. CellSoft® Soft Substrate culture dishes are pre-coated in a specially formulated silicone elastomer with covalently bonded proteins (Collagen Type I) to improve cell attachment or Untreated surface (Table 1). Moduli stiffness ranges from 1, 5, 10, 20, 40, and 60 kPa. Flexcell® recommends that users culture their stock cells on a given stiffness substrate and matrix coating and conduct their experiment on the same type of surface. This will reduce “substrate shock”, moving cells from one stiffness and matrix coating to another. Users can repeatedly Trypsinize and replat cells on the CellSoft®, matrix-coated surfaces up to three times.



PLATING CELLS ON CELLSOFT® CULTURE DISHES

Cells should be seeded onto the membranes according to your laboratory’s established protocol for primary cultures or continuous cell lines in the medium of choice. In general:

1. Release cells from their substrates with 0.05% trypsin, trypsin-EDTA, 0.05% bacterial collagenase, or other means.
2. Add serum containing media to the cells to neutralize the trypsin or collagenase.
3. Count cells and determine the number of cells needed. CellSoft®100mm round dishes have a total growth surface area of 55cm² *NOTE: Cell seeding density will vary depending on cell type. We recommend testing cell seeding densities to determine the best cell number for your application and cell type.*
4. Wash cells with medium to remove trypsin or collagenase.
5. Resuspend cells in medium of choice and seed onto culture dish. If cells will be stretched, follow steps 1-5 using CellSoft®BioFlex flexible bottom culture plates. We recommend having 3 mL of media in each well and changing media approximately every 48-72 hours, or according to your laboratory’s standard tissue culture methods. It should be noted that the only cells that receive uniform strain are those attached to the area of the membrane over the loading post when the membrane is in its fully stretched position. Therefore, it is best to plate cells using a Flexcell Cell Seeder™ device.

ORDERING INFORMATION

CellSoft® culture dishes (Cat. No. CSoft 100mm) are sold individually or in packs of 5. Each plate is sterile and individually packaged in a sealed bag. See Table 1 for catalog numbers and corresponding protein coatings. Flexcell® culture plates have a shelf life of 1 year when stored at room temperature or 4 °C in the dark or out of direct light.

*This product is intended for use in research and development only.

Table 1. CellSoft® culture dish catalog numbers and corresponding protein coating.

Catalog Number	Coating*
CSoft 100mm-U	Untreated
CSoft 100mm-C	Collagen I

*For more information on these coatings, see [Tech Report 106: Matrix Bonded Growth Surfaces. Growing Cells in a More Natural Matrix Environment.](#)